

Serial Number:

08/823,980C

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JUL 20

TECH CENTER 1000/2900

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: Seq 107-109 - aligned a.a. nos

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/08/823,980C

DATE: 07/10/2000
 TIME: 12:31:41

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\07102000\H823980C.raw

TECH CENTER 1600/2900

SEQUENCE LISTING

4 (1) GENERAL INFORMATION:
 6 (i) APPLICANT: Weiner, Amy J.
 7 Houghton, Michael
 9 (ii) TITLE OF INVENTION: Conserved Motif of Hepatitis C Virus
 10 E2/NS1 Region
 12 (iii) NUMBER OF SEQUENCES: 134
 14 (iv) CORRESPONDENCE ADDRESS:
 15 (A) ADDRESSEE: Chiron Corporation
 16 (B) STREET: 4560 Horton Street
 17 (C) CITY: Emeryville
 18 (D) STATE: CA
 19 (E) COUNTRY: USA
 20 (F) ZIP: 94608-2916
 22 (v) COMPUTER READABLE FORM:
 23 (A) MEDIUM TYPE: Floppy disk
 24 (B) COMPUTER: IBM PC compatible
 25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 26 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
 C--> 28 (vi) CURRENT APPLICATION DATA:
 C--> 29 (A) APPLICATION NUMBER: US/08/823,980C
 C--> 30 (B) FILING DATE: 25-Mar-1997
 31 (C) CLASSIFICATION:
 33 (viii) ATTORNEY/AGENT INFORMATION:
 34 (A) NAME: Rosen, Mark J.
 35 (B) REGISTRATION NUMBER: 39,822
 36 (C) REFERENCE/DOCKET NUMBER: CHIR-0108
 38 (ix) TELECOMMUNICATION INFORMATION:
 39 (A) TELEPHONE: 215-564-6525
 40 (B) TELEFAX: 215-568-3439
 43 (2) INFORMATION FOR SEQ ID NO: 1:
 45 (i) SEQUENCE CHARACTERISTICS:
 46 (A) LENGTH: 6 amino acids
 47 (B) TYPE: amino acid
 48 (C) STRANDEDNESS: single
 49 (D) TOPOLOGY: linear
 51 (ii) MOLECULE TYPE: peptide
 53 (ix) FEATURE:
 54 (A) NAME/KEY: Xaa
 55 (B) LOCATION: 1
 56 (D) OTHER INFORMATION: /label= variable
 57 /note= "Represents Ala, Arg, Asp, Gly, Lys, Ser,
 58 or Thr"
 60 (ix) FEATURE:
 61 (A) NAME/KEY: Xaa
 62 (B) LOCATION: 2
 63 (D) OTHER INFORMATION: /label= variable

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/08/823,980C
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Input Set : A:\Pto.amc
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64 /note= "Represents Ile, Leu, Met, Phe or Trp"
66 (ix) FEATURE:
67 (A) NAME/KEY: Xaa
68 (B) LOCATION: 3
69 (D) OTHER INFORMATION: /label= variable
70 /note= "Represents Leu or Phe"
72 (ix) FEATURE:
73 (A) NAME/KEY: Xaa
74 (B) LOCATION: 6
75 (D) OTHER INFORMATION: /label= variable
76 /note= "Represents Ala or Gly"
79 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
W--> 81 Xaa Xaa Xaa Xaa Xaa Xaa
82 1 5
85 (2) INFORMATION FOR SEQ ID NO: 2:
87 (i) SEQUENCE CHARACTERISTICS:
88 (A) LENGTH: 32 amino acids
89 (B) TYPE: amino acid
90 (C) STRANDEDNESS: single
91 (D) TOPOLOGY: linear
93 (ii) MOLECULE TYPE: peptide
95 (ix) FEATURE:
96 (A) NAME/KEY: Xaa
97 (B) LOCATION: 1
98 (D) OTHER INFORMATION: /label= Dpr
99 /note= 2,3-diaminopropionic is acetyl cysteine
101 (ix) FEATURE:
102 (A) NAME/KEY: Xaa
103 (B) LOCATION: 2
104 (D) OTHER INFORMATION: /label= Ahe
105 /note= 2-amino heptanoic is butyl alanine
111 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
W--> 113 Xaa Xaa Glu Thr His Val Thr Gly Gly Ser Ala Gly His Thr Val Ser
114 1 5 10 15
116 Gly Phe Val Ser Leu Leu Ala Pro Gly Ala Lys Gln Asn Val Gln Leu
117 20 25 30
121 (2) INFORMATION FOR SEQ ID NO: 3:
123 (i) SEQUENCE CHARACTERISTICS:
124 (A) LENGTH: 5 amino acids
125 (B) TYPE: amino acid
126 (C) STRANDEDNESS: single
127 (D) TOPOLOGY: linear
129 (ii) MOLECULE TYPE: peptide
133 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
135 Val Ser Leu Leu Ala
136 1 5
139 (2) INFORMATION FOR SEQ ID NO: 4:
141 (i) SEQUENCE CHARACTERISTICS:
142 (A) LENGTH: 7 amino acids

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RAW SEQUENCE LISTING

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143      (B) TYPE: amino acid
144      (C) STRANDEDNESS: single
145      (D) TOPOLOGY: linear
147      (ii) MOLECULE TYPE: peptide
151      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
153      Ser Leu Leu Ala Pro Gly Ala
154      1      5
157 (2) INFORMATION FOR SEQ ID NO: 5:
159      (i) SEQUENCE CHARACTERISTICS:
160          (A) LENGTH: 5 amino acids
161          (B) TYPE: amino acid
162          (C) STRANDEDNESS: single
163          (D) TOPOLOGY: linear
165      (ii) MOLECULE TYPE: peptide
169      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
171      Leu Ala Pro Gly Ala
172      1      5
176 (2) INFORMATION FOR SEQ ID NO: 6:
178      (i) SEQUENCE CHARACTERISTICS:
179          (A) LENGTH: 7 amino acids
180          (B) TYPE: amino acid
181          (C) STRANDEDNESS: single
182          (D) TOPOLOGY: linear
184      (ii) MOLECULE TYPE: peptide
187      (ix) FEATURE:
188          (A) NAME/KEY: Xaa
189          (B) LOCATION: 7
190          (D) OTHER INFORMATION: /label= variable
191 /note= "Represents Ala, Pro or Ser"
194      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
W--> 196      Ser Leu Leu Xaa Xaa Gly Xaa
197      1      5
200 (2) INFORMATION FOR SEQ ID NO: 7:
202      (i) SEQUENCE CHARACTERISTICS:
203          (A) LENGTH: 7 amino acids
204          (B) TYPE: amino acid
205          (C) STRANDEDNESS: single
206          (D) TOPOLOGY: linear
208      (ii) MOLECULE TYPE: peptide
210      (ix) FEATURE:
211          (A) NAME/KEY: Xaa
212          (B) LOCATION: 7
213          (D) OTHER INFORMATION: /label= variable
214 /note= "Represents Ala, Pro or Ser"
217      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
W--> 219      Ser Leu Phe Xaa Xaa Gly Xaa
220      1      5
224 (2) INFORMATION FOR SEQ ID NO: 8:
226      (i) SEQUENCE CHARACTERISTICS:

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RAW SEQUENCE LISTING

DATE: 07/10/2000

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Input Set : A:\Pto.amc

Output Set: N:\CRF3\07102000\H823980C.raw

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227             (A) LENGTH: 31 amino acids
228             (B) TYPE: amino acid
229             (C) STRANDEDNESS: single
230             (D) TOPOLOGY: linear
232     (ii) MOLECULE TYPE: peptide
234     (ix) FEATURE:
235         (A) NAME/KEY: Xaa
236         (B) LOCATION: 1
237         (D) OTHER INFORMATION: /label= variable
238 /note= "Represents Any Amino Acid"
240     (ix) FEATURE:
241         (A) NAME/KEY: Xaa
242         (B) LOCATION: 3
243         (D) OTHER INFORMATION: /label= variable
244 /note= "Represents Any Amino Acid"
246     (ix) FEATURE:
247         (A) NAME/KEY: Xaa
248         (B) LOCATION: 8
249         (D) OTHER INFORMATION: /label= variable
250 /note= "Represents Any Amino Acid"
252     (ix) FEATURE:
253         (A) NAME/KEY: Xaa
254         (B) LOCATION: 14
255         (D) OTHER INFORMATION: /label= variable
256 /note= "Represents Any Amino Acid"
257     (ix) FEATURE:
258         (A) NAME/KEY: Xaa
259         (B) LOCATION: 16
260         (D) OTHER INFORMATION: /label= variable
261 /note= "Represents Any Amino Acid"
263     (ix) FEATURE:
264         (A) NAME/KEY: Xaa
265         (B) LOCATION: 17
266         (D) OTHER INFORMATION: /label= variable
267 /note= "Represents Any Amino Acid"
269     (ix) FEATURE:
270         (A) NAME/KEY: Xaa
271         (B) LOCATION: 21
272         (D) OTHER INFORMATION: /label= variable
273 /note= "Represents Any Amino Acid"
275     (ix) FEATURE:
276         (A) NAME/KEY: Xaa
277         (B) LOCATION: 22
278         (D) OTHER INFORMATION: /label= variable
279 /note= "Represents Any Amino Acid"
281     (ix) FEATURE:
282         (A) NAME/KEY: Xaa
283         (B) LOCATION: 24
284         (D) OTHER INFORMATION: /label= variable

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RAW SEQUENCE LISTING DATE: 07/10/2000
 PATENT APPLICATION: US/08/823,980C TIME: 12:31:41

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\07102000\H823980C.raw

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285 /note= "Represents Any Amino Acid"
287   (ix) FEATURE:
288       (A) NAME/KEY: Xaa
289       (B) LOCATION: 27
290       (D) OTHER INFORMATION: /label= variable
291 /note= "Represents Any Amino Acid"
293   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
W--> 295   Xaa Thr Xaa Val Thr Gly Gly Xaa Ala Ala Arg Thr Thr Xaa Gly Xaa
296       1 /           5 5           10 /           15
W--> 298   Xaa Ser Leu Phe Xaa Xaa Gly Xaa Ser Gln Xaa Ile Gln Leu Ile
299       20           25           30
303 (2) INFORMATION FOR SEQ ID NO: 9:
305   (i) SEQUENCE CHARACTERISTICS:
306       (A) LENGTH: 31 amino acids
307       (B) TYPE: amino acid
308       (C) STRANDEDNESS: single
309       (D) TOPOLOGY: linear
311   (ii) MOLECULE TYPE: peptide
313   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
315   Ala Thr Tyr Ala Thr Gly Ala Ala Gln Gly His Ala Thr Asn Ser Phe
316       1           5           10           15
318   Val Ser Leu Phe Arg Ser Gly Ala Ser Gln Asn Leu Lys Leu Val
319       20           25           30
322 (2) INFORMATION FOR SEQ ID NO: 10:
324   (i) SEQUENCE CHARACTERISTICS:
325       (A) LENGTH: 31 amino acids
326       (B) TYPE: amino acid
327       (C) STRANDEDNESS: single
328       (D) TOPOLOGY: linear
330   (ii) MOLECULE TYPE: peptide
332   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
334   Ser Thr Gln Val Thr Gly Gly Gln Ala Ala His Thr Val Arg Gly Val
335       1           5           10           15
337   Ala Ser Ile Phe Ser Pro Gly Ser Arg Gln Asp Ile Ser Leu Ile
338       20           25           30
342 (2) INFORMATION FOR SEQ ID NO: 11:
344   (i) SEQUENCE CHARACTERISTICS:
345       (A) LENGTH: 31 amino acids
346       (B) TYPE: amino acid
347       (C) STRANDEDNESS: single
348       (D) TOPOLOGY: linear
350   (ii) MOLECULE TYPE: peptide
352   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
354   Ser Thr Arg Val Thr Gly Gly Gln Gln Gly Arg Ala Val His Gly Ile
355       1           5           10           15
357   Ala Ser Leu Phe Ser Leu Gly Ala Ser Gln Lys Ile Gln Leu Val
358       20           25           30
360 (2) INFORMATION FOR SEQ ID NO: 12:
362   (i) SEQUENCE CHARACTERISTICS:

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VERIFICATION SUMMARY

DATE: 07/10/2000

PATENT APPLICATION: US/08/823,980C

TIME: 12:31:42

Input Set : A:\Pto.amc

Output Set: N:\CRF3\07102000\H823980C.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(vi) CURRENT APPLICATION DATA:]
L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:2737 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133
L:2757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134

1644

RAW SEQUENCE LISTING DATE: 07/07/2000
 PATENT APPLICATION: US/08/823,980C TIME: 12:29:11

Input Set : A:\ES.txt
 Output Set: N:\CRF3\07072000\H823980C.raw

SEQUENCE LISTING

4 (1) GENERAL INFORMATION:
 6 (i) APPLICANT: Weiner, Amy J.
 7 Houghton, Michael
 9 (ii) TITLE OF INVENTION: Conserved Motif of Hepatitis C Virus
 10 E2/NS1 Region
 12 (iii) NUMBER OF SEQUENCES: 134
 14 (iv) CORRESPONDENCE ADDRESS:
 15 (A) ADDRESSEE: Chiron Corporation
 16 (B) STREET: 4560 Horton Street
 17 (C) CITY: Emeryville
 18 (D) STATE: CA
 19 (E) COUNTRY: USA
 20 (F) ZIP: 94608-2916
 22 (v) COMPUTER READABLE FORM:
 23 (A) MEDIUM TYPE: Floppy disk
 24 (B) COMPUTER: IBM PC compatible
 25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 26 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
 C--> 28 (vi) CURRENT APPLICATION DATA:
 C--> 29 (A) APPLICATION NUMBER: US/08/823,980C
 C--> 30 (B) FILING DATE: 25-Mar-1997
 31 (C) CLASSIFICATION:
 33 (viii) ATTORNEY/AGENT INFORMATION:
 34 (A) NAME: Rosen, Mark J.
 35 (B) REGISTRATION NUMBER: 39,822
 36 (C) REFERENCE/DOCKET NUMBER: CHIR-0108
 38 (ix) TELECOMMUNICATION INFORMATION:
 39 (A) TELEPHONE: 215-564-6525
 40 (B) TELEFAX: 215-568-3439

*Does Not Comply
 Corrected Diskette Needed*

ERRORED SEQUENCES

2176 (2) INFORMATION FOR SEQ ID NO: 107:
 2178 (i) SEQUENCE CHARACTERISTICS:
 2179 (A) LENGTH: 31 amino acids
 2180 (B) TYPE: amino acid
 2181 (C) STRANDEDNESS: single
 2182 (D) TOPOLOGY: linear
 2184 (ii) MOLECULE TYPE: peptide
 2188 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:
 2190 Ala Thr Tyr Thr Ser Gly Gly Val Ala Gly Arg Thr Thr Ser Gly
 2191 1 5 10 15
 2193 Phe Thr Ser Leu Phe Ser Ser Gly Ala Ser Gln Lys Ile Gln Leu Val
 E--> 2194 ~~20~~ 20 ~~25~~ 25 ~~30~~ 30
 2218 (2) INFORMATION FOR SEQ ID NO: 109:

RAW SEQUENCE LISTING DATE: 07/07/2000
 PATENT APPLICATION: US/08/823,980C TIME: 12:29:11

Input Set : A:\ES.txt
 Output Set: N:\CRF3\07072000\H823980C.raw

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2220      (i) SEQUENCE CHARACTERISTICS:
2221          (A) LENGTH: 31 amino acids
2222          (B) TYPE: amino acid
2223          (C) STRANDEDNESS: single
2224          (D) TOPOLOGY: linear
2226      (ii) MOLECULE TYPE: peptide
2230      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:
2231      Glu Thr His Thr Thr Gly Arg Val Val Gly His Thr Thr Ser Gly
2232      1          5          10          15
2234      Phe Thr Ser Leu Phe Ser Ser Gly Ala Ser Gln Lys Ile Gln Leu Val
E--> 2235      20 20      25 25      30 30
2744      (2) INFORMATION FOR SEQ ID NO: 134:
2746          (i) SEQUENCE CHARACTERISTICS:
2747              (A) LENGTH: 6 amino acids
2748              (B) TYPE: amino acid
2749              (C) STRANDEDNESS: single
2750              (D) TOPOLOGY: linear
2751          (ii) MOLECULE TYPE: peptide
2755          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 134:
W--> 2757      Ser Leu Phe Xaa Xaa Gly
2758      1          5
E--> 2761      1
E--> 2764      1

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VERIFICATION SUMMARY DATE: 07/07/2000
PATENT APPLICATION: US/08/823,980C TIME: 12:29:12

Input Set : A:\ES.txt
Output Set: N:\CRF3\07072000\H823980C.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(vi) CURRENT APPLICATION DATA:]
L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:2194 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:107
L:2235 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:109
L:2737 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133
L:2757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134
L:2761 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:134
M:332 Repeated in SeqNo=134